

DIRECT TESTIMONY OF
ANTHONY SANDONATO
ON BEHALF OF
THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF
DOCKET NO. 2018-319-E
IN RE: APPLICATION OF DUKE ENERGY CAROLINAS, LLC
FOR ADJUSTMENTS IN ELECTRIC RATE SCHEDULES AND TARIFFS AND
REQUEST FOR AN ACCOUNTING ORDER

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.

A. My name is Anthony Sandonato. My business address is 1401 Main Street, Suite 900, Columbia, South Carolina, 29201. I am employed by the South Carolina Office of Regulatory Staff (“ORS”) in the Utility Rates and Services Division as a Regulatory Analyst.

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I received my Bachelor of Science Degree in Nuclear Engineering from North Carolina State University in 2011. Prior to my employment with ORS, I was employed as an analyst with a global professional, technology, and marketing service firm working with large investor-owned utilities on energy efficiency program design and implementation. I joined ORS in 2016.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA (“COMMISSION”)?

A. Yes.

Q. WHAT IS THE MISSION OF THE OFFICE OF REGULATORY STAFF?

A. ORS represents the public interest as defined by the South Carolina General Assembly as follows:

The concerns of the using and consuming public with respect to public utility services, regardless of the class of customer, and preservation of continued investment in and maintenance of utility facilities so as to provide reliable and high-quality utility services.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to provide ORS's position on the following proposals made by Duke Energy Carolinas, LLC ("Company" or "DEC") related to the Grid Improvement Plan ("GIP"):

1. Recovery mechanism;
2. Allocation factors used for recovery;
3. Request for a deferral of associated costs;
4. Request that the Commission approve the GIP; and
5. The deferred cost balance related to South Carolina grid investment.

Q. PLEASE SUMMARIZE DEC'S REQUEST RELATED TO ITS GRID IMPROVEMENT PLAN.

A. Through its application the Company requests the Commission approve DEC's GIP as described by Company witness Oliver in Oliver Exhibit 9, which details DEC's and Duke Energy Progress, LLC's ("DEP") (together the "Companies" or "Duke Energy") 2019-2022 proposed South Carolina grid investment totaling approximately \$455 million. The Company has asked the Commission to approve the associated Phase 1 and Phase 2 rates effective June 1, 2020 and June 1, 2021 respectively as provided in Company witness Pirro Direct Exhibit 7. As part of its request, the Company seeks approval to defer costs

associated with the incremental grid investments placed in service after December 31, 2018 until those costs are presumptively included in base rates, either through the Phase 1 or 2 rates or a subsequent general rate case.

I. RECOVERY MECHANISM FOR THE GRID IMPROVEMENT PLAN

Q. HOW DOES THE COMPANY PROPOSE TO RECOVER COSTS FOR THE GRID IMPROVEMENT PLAN?

A. Company witness Smith describes the proposed phased-in or multi-year rate plan (“MRP”) on page 41 of her direct testimony.

We propose that the audit by ORS be conducted prior to the effective date of the Phase 1 and 2 rates to be approved in this case. Accordingly, we recommend the following parameters for the audit:

- By March 1 of 2020 and 2021, the Company will file an updated version of Smith Exhibit 3 showing the actual grid improvement plan balances placed in service and incremental O&M by month during the prior calendar year. The Company will certify that these plant in service and O&M amounts are part of the Grid Improvement Plan described by Witness Oliver and are ready to be audited. The Company will also include a narrative explaining the work completed and the status of the plan.
- The ORS should audit the plant in service balances and confirm whether the Company has indeed placed in service the amounts included in the updated Smith Exhibit 3 and spent the incremental O&M and that these were investments under the Commission-approved Grid Improvement Plan. *The audit should be limited in scope and not a recreation of the rate case (return on equity, cost allocation, etc.) or an examination of the appropriateness of the Grid Improvement Plan.* (emphasis added)
- ORS should be given sixty (60) days from the date that the Company files the updated Smith Exhibit 3 to complete its audit and file a report with the Commission on May 1.
- When ORS certifies to the Commission by May 1 that the Company has met the conditions above, the Phase 1 and 2 rates should be placed into effect for service on or after June 1.

Q. WHAT COST RECOVERY MECHANISM DOES ORS RECOMMEND THE COMMISSION AUTHORIZE FOR CAPITAL AND OPERATING EXPENSES RELATED TO GRID IMPROVEMENTS?

A. It is unreasonable to expect an adequate review of the benefits and drawbacks of the implementation of the proposed phase-in or MRP within the statutory deadlines of this Docket. MRP's are complex and often the work of state policy makers. It is important to design a MRP that provides the proper level of incentives to the Company, protects the customers from risk, and fairly distributes the benefits. Therefore, it is ORS's position that any phase-in or MRP proposal should be evaluated outside of a general rate case to allow for a transparent and deliberative process. Other state commissions have approached alternative regulation and MRP's with careful study and design.

It is ORS's position that additional investments to the Company's transmission and distribution system should be recovered through traditional ratemaking. Meaning, the Company may request recovery in a general rate proceeding after the Company incurs the costs. This is contrasted with the Company's proposal that denies interested parties the ability to meaningfully participate in the review process preceding the Phase 1 and Phase 2 rate increases. A traditional rate recovery method provides adequate notice, an opportunity for the customers to participate in the rate making process and shifts the business risks of grid investment to the Company. Under the phase-in or MRP proposed by the Company, the customer may bear a significant amount of the risk for the Company's decisions and strategies to invest in grid improvements. In its cost recovery proposal, DEC did not detail customer benefits related to the phase-in or MRP including lower rates, less frequent rate cases or improved service and reliability performance.

Q. IS THE COMPANY'S PROPOSED RECOVERY METHOD IN THE PUBLIC INTEREST AS DEFINED IN TITLE 58, CHAPTER 4?

A. No. The request by the Company for a phase-in or MRP related to the GIP contains a pre-approval provision that would pre-determine the prudence of the grid investments made by the Company before the Company makes the investment. The proposed phase-in or MRP does not allow for an examination of the prudence of the specific decisions and spending of the Company during the annual audit process. This restricts the Commission and ORS's ability to adequately examine specific costs and the prudence of the Company's decisions to incur those costs. These limitations are similar to those found in the now repealed Base Load Review Act. Absent a rate case to recover additional costs, the Company would have the ability to deliver the economic benefits of its investment to shareholders while withholding the benefit to the customer which may be a reduction in operating costs.¹

II. ALLOCATION FACTORS FOR THE GRID IMPROVEMENT PLAN

Q. WHAT ALLOCATION FACTORS HAS THE COMPANY PROPOSED TO USE FOR THE GRID IMPROVEMENT PLAN?

A. The Company proposes to use traditional transmission and distribution allocation factors. This is detailed by Company witness Hager on page 16 of her direct testimony.

Q. DOES ORS RECOMMEND THE COMPANY'S PROPOSED ALLOCATION METHOD FOR COSTS ASSOCIATED WITH GRID IMPROVEMENTS?

A. No. ORS recommends that a thorough review of the allocation method of specific grid modernization investments be undertaken. A review would ensure the customer

¹ Modernizing the Grid in the Public Interest: Getting a Smarter Grid at the least cost for South Carolina Customers
pg. 12

1 classes that receive the greatest benefit from additional grid investments to increase
2 reliability and resiliency would be charged rates proportional to the economic benefit they
3 receive.

4 **III. DEFERRAL OF COSTS ASSOCIATED WITH THE GRID**
5 **IMPROVEMENT PLAN**

6 **Q. IS A DEFERRAL NECESSARY FOR FUTURE COSTS ASSOCIATED WITH THE**
7 **COMPANY'S INVESTMENTS IN GRID IMPROVEMENTS?**

8 **A.** No. As discussed earlier, recovery of costs should be governed by traditional
9 ratemaking and all additional investments in transmission and distribution should be
10 recovered as part of the next general rate proceeding. The requested deferral of future costs
11 outside of the next general rate proceeding Test Year will not benefit the customers.

12 **IV. COMMISSION APPROVAL OF THE GRID IMPROVEMENT PLAN**

13 **Q. DOES ORS RECOMMEND THE COMMISSION APPROVE THE GRID**
14 **IMPROVEMENT PLAN AS PROPOSED BY THE COMPANY?**

15 **A.** No. ORS does not recommend the Commission approve the GIP as proposed by
16 the Company in this Docket. The issue of grid modernization is discussed as part of the
17 South Carolina State Energy Plan ("Energy Plan"). The Energy Plan outlines the following:

18 1. Policies in South Carolina should continue to support the upgrade to
19 leading-edge grid and metering technology while supporting the continued
20 recovery of the asset life of the older equipment being replaced.

21
22 2. Categories of grid investment should be identified and updated in
23 subsequent Energy Plans since modernization of the grid is more diverse
24 than central station generation investment. Utilities should be encouraged
25 to bring their major grid modernization projects before the PSC.²

² <http://www.energy.sc.gov/files/Energy%20Plan%20Appendices%2003.02.2018.pdf>

1 Although the Energy Plan encourages utilities to bring major grid modernization
2 projects before the Commission, ORS recommends major grid modernization projects and
3 unique cost recovery strategies, such as those outlined by DEC in the GIP and subsequent
4 phase-in and MRP, should be considered in a proceeding separate from a general rate
5 proceeding. In the context of a general rate case, interested parties are not able to
6 adequately review and determine the benefits and costs of the GIP and the proposed
7 alternative cost recovery strategy because of the six-month statutory time limitation
8 specified in S.C. Code Ann. § 58-5-240(C). A separate proceeding promotes transparency
9 and allows interested stakeholders to participate in a process focused on the examination
10 of a comprehensive grid investment strategy.

11 The North Carolina Utilities Commission (“NCUC”) issued an Order in Docket E-
12 7 Sub 1146 which stated, “[f]or now, *DEC should utilize existing proceedings, such as the*
13 *Integrated Resource Planning and Smart Grid Technology Plan docket, to inform the*
14 *Commission on and collaborate with stakeholders regarding grid modernization initiatives*
15 *and the potential cost recovery mechanisms for such initiatives.*”³ ORS recommends the
16 Commission take a similar approach and encourage collaboration and planning to make
17 sure all grid investments and cost recovery is in the public interest.

18 ORS recommends the Commission not approve the GIP in this Docket and instead
19 instruct the Company to file a separate petition with the Commission for future
20 consideration.

³ NCUC Order pg. 19 #44

Q. IN THE THREE-MONTH PERIOD WHICH LED UP TO THE PREPARATION OF TESTIMONY, WHAT ACTIONS DID ORS TAKE TO EVALUATE THE COMPANY'S GRID IMPROVEMENT PLAN?

A. ORS has been carefully studying grid modernization industry best practices including the Power/Forward Rider filed by the Company in North Carolina. ORS reached out to industry leaders, other state regulators, reviewed and monitored other states' proceedings, participated in webinars and reviewed literature on the topic. This included information provided by but not limited to:

- United States Department of Energy
- National Renewable Energy Laboratory
- Grid Lab
- North Carolina Clean Energy Technology Center

After the GIP was filed by the Company on November 8, 2018, ORS reviewed the information provided by the Company and made available to the public for review. This includes information provided to outside participants at the Grid Improvement Initiative workshops held in August and October. ORS provided assistance to Grid Labs during the research for the white paper specific to South Carolina and Duke Energy's GIP.⁴

Q. ARE OTHER STATES SEEING PROPOSALS FOR GRID MODERNIZATION?

A. Yes, many states have taken actions in Grid Modernization in 2018. The topic of grid modernization is an issue being discussed across the country in almost all states and not unique to South Carolina.⁵ Much of the activity so far has been on policy and regulatory

⁴https://static1.squarespace.com/static/598e2b896b8f5bf3ae8669ed/t/5c523bc6bba223482282de50/1548893150445/GridLab_SC_GridMod.pdf

⁵ The 50 States of Grid Modernization Q4 Quarterly Report pg. 10

1 reform with few states taking action to implement recovery of requested plans. Utilities
2 have made requests for ratemaking treatment for grid investments and regulators have
3 downsized or rejected grid modernization proposals.^{6,7} Grid modernization will continue
4 to be a topic discussed throughout the industry in 2019 and beyond.

5 Some states have considered revisions to utility planning processes and state
6 regulations enabling market access related to grid modernization.⁸ Other states have passed
7 state statutes that have defined “grid modernization” such as Minnesota⁹ and
8 Massachusetts.¹⁰ Ohio devoted the entire year of 2018 to the development of a grid
9 modernization plan specific to the state.¹¹ In Oregon, a report was published in September
10 of 2018 which investigated trends, technologies and policy drivers in the electricity sector
11 that might impact the existing regulatory system.¹²

12 Some states took action regarding proposed grid modernization plans and recovery
13 mechanisms. In Virginia, Dominion Energy submitted a proposed grid modernization plan
14 based on the policy implementation of the Grid Transformation and Security Act of 2018.
15 Recently, the Virginia State Corporation Commission reviewed the plan and issued an
16 order that approved very few portions of the plan proposed by Virginia Dominion Energy.¹³
17 As mentioned above DEC proposed a Grid Reliability and Resiliency Rider as part of the
18 initial Power/Forward plan which was rejected by the NCUC.

⁶ Kentucky Public Service Commission Case No. 2018-00005. Order dated August 30, 2018.

⁷ Massachusetts Board of Public Utilities Case No. 15-120 through 15-122. Order dated May 10, 2018.

⁸ The 50 States of Grid Modernization Q4 Quarterly Report pg. 69

⁹ MS Statute 116C.779(k)

¹⁰ MA Dept. of Public Utilities 12-76-B

¹¹ <https://www.puco.ohio.gov/industry-information/industry-topics/powerforward/powerforward-a-roadmap-to-ohios-electricity-future/>

¹² <https://www.puc.state.or.us/Renewable%20Energy/SB978LegislativeReport-2018.pdf>

¹³ Virginia Electric and Power Company – Final Order – 1/17/19 PUR-2018-00100

Q. WERE THE STAKEHOLDER ENGAGEMENT ACTIVITIES BY THE COMPANY CONDUCTED IN SUCH A MANNER TO ALLOW STAKEHOLDERS AN OPPORTUNITY TO ANALYZE THE PROPOSED GRID IMPROVEMENT PLAN?

A. No. ORS appreciates the efforts of the Company to engage with stakeholders, but the two workshops and limited time for review did not result in meaningful stakeholder participation. In contrast, in developing Power Forward Ohio, the Public Service Commission of Ohio hosted approximately 127 speakers and received approximately 100 hours of education. This effort to involve interested stakeholders demonstrates the complexity of the issues and highlights the thorough analysis required to undertake a comprehensive GIP to ensure that the investments benefit the customers. The Company has committed to continued dialog as they embark on the process of modernizing the grid.¹⁴

Q. PLEASE PROVIDE A BRIEF OVERVIEW OF DUKE ENERGY CAROLINA'S PROPOSED GRID IMPROVEMENT PLAN.

A. Company witness Oliver summarizes the GIP as three key components:

1. Protect the Grid – Compliance-driven programs that need to be completed to reduce physical and cyber threats to the grid.
2. Modernize the Grid – equipment, software, hardware, operating systems, and/or accepted system operating practice that has advanced causing the need for rapid changes within the utility at a systems development level.
3. Optimize the customer experience – transform the grid to prepare for the energy opportunities that lie ahead.

¹⁴ Oliver Direct Testimony pg. 44 lines 10-13

Q. DOES THE COMPANY CORRECTLY IDENTIFY EMERGING ISSUES THAT IMPACT THE TRANSMISSION AND DISTRIBUTION SYSTEMS?

A. Yes, Company witness Oliver's Exhibit 2 identified seven "Megatrends" impacting DEC's grid in South Carolina. These trends are consistent with those identified by utilities across the country as factors that require continued grid investment. The seven specific megatrends include:

1. Population and business growth in South Carolina are heavily concentrated in urban and suburban areas;
2. Technology is advancing at a rapid rate in the areas of renewables and distributed energy resources, which means new types of load and resources impacting the grid;
3. Technology is advancing rapidly within the devices and systems that operate and manage the grids, offering new capabilities and requiring new functionalities;
4. Customer expectations and uses of the grid are very different from past generations;
5. There is an increase in environmental commitments from the international to local level in service territory;
6. The number, severity and impact of weather events on customers have been increasing significantly; and
7. The threat of physical and cyber-attacks on grid infrastructure is more sophisticated and on the rise.

Q. IS THE COMPANY REQUESTING COST RECOVERY FOR ALREADY INCURRED GRID INVESTMENTS?

A. Yes. The Company has requested recovery for grid investments of approximately \$41 million through December 2018. The grid investments included transmission and

1 distribution hardening and resilience, physical and cyber security, self-optimizing grid,
2 targeted undergrounding and integrated systems and operations planning. ORS recognizes
3 the Company must make continued investment in and maintenance of all of its utility
4 facilities to provide reliable and high-quality utility service. ORS recommends the
5 Commission approve cost recovery related to these grid investments.

6 **V. THE DEFERRED COST BALANCE RELATED TO SOUTH CAROLINA**
7 **GRID INVESTMENT**

8 **Q. WHAT IS ORS'S RECOMMENDATION FOR THE AMORTIZATION PERIOD**
9 **RELATED TO RECOVERY OF THE CURRENT DEFERRED GRID**
10 **INVESTMENT COSTS?**

11 **A.** ORS recommends the amortization period for the current deferred grid investments,
12 as approved by Order 2018-751, should be five (5) years which is the same as the
13 Company's rate case expenses. The Company will continue to invest in its transmission
14 and distribution system and will request to recover additional grid investments as part of
15 its next general rate proceeding.

16 **Q. WILL YOU UPDATE YOUR TESTIMONY BASED ON INFORMATION THAT**
17 **BECOMES AVAILABLE?**

18 **A.** Yes. ORS fully reserves the right to revise its recommendations via supplemental
19 testimony should new information not previously provided by the Company, or other
20 sources, become available.

21 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

22 **A.** Yes.